

This listing of claims will replace the originally filed claims in the application.

Listing of Claims:

Claims 1 – 12 (cancelled)

Claim 13 (currently amended): The method of claim 12, A method which may be used for treating a liquid bath of oxygen, said method comprising:

- a) providing a liquid bath in the bottom of a cryogenic distillation column or a column element, wherein:
 - 1) said liquid bath comprises at least about 70 mol% oxygen; and
 - 2) said column or column element forms part of a system of columns that are used for the separation of air;
- b) boiling continuously a portion of said liquid bath with at least one first reboiler, wherein said first reboiler is made of aluminum;
- c) purging a portion of said liquid bath, wherein said purging prevents an excessive build up of inflammable impurities in said bath;
- d) sending said purged portion to at least one second reboiler, wherein said second reboiler is less inflammable than said first reboiler;
- e) sending oxygen boiled by said second reboiler back to said column; and
- f) purging a portion of the oxygen rich liquid bath treated by said second reboiler,

wherein said purged portion sent to said second reboiler is at least about 10 mol% of said total air stream feeding said system of distillation columns.

Claim 14 (original): The method of claim 13, wherein said purged portion sent to said second reboiler is at least about 20 mol% of said total air stream feeding said system of distillation columns.

Claim 15 – 18 (cancelled)

Claim 19 (currently amended): The apparatus of claim 17, An apparatus which may be used for the cryogenic distillation of air, said apparatus comprising:

- a) a cryogenic distillation column or column element, wherein said column comprises a sump;
- b) at least one first aluminum reboiler for treating an oxygen rich liquid bath, wherein said first aluminum reboiler is located in said sump;
- c) a first purge, wherein:
 - 1) said first purge sends at least a portion of said bath into at least one second reboiler; and
 - 2) said second reboiler is less inflammable than said first reboiler;
- d) a conduit which sends oxygen vaporized by said second reboiler back into said column; and
- e) a second purge, wherein said second purge purges a portion of said bath in said second reboiler,

further comprising a partition located in said column, wherein:

- a) f) said partition divides said sump into a first compartment and a second compartment;
- b) g) said first reboiler is located in said first compartment;
- c) h) said second reboiler is located in said second compartment; and
- d) i) said partition has a height such that said second compartment is fed oxygen rich liquid by overflow from said first compartment.

Claim 20 (original): The apparatus of claim 19, further comprising a measuring device, wherein said device measures the level of said oxygen rich liquid present in said first and said second compartments.

Claim 21 - 22 (cancelled)

Claim 23 (original): An apparatus which may be used for cryogenic distillation of air, said apparatus comprising:

- a) a low pressure column, wherein said low pressure column comprises a sump;
- b) at least one first aluminum reboiler for treating an oxygen rich liquid bath, wherein said first aluminum reboiler is located in said sump;
- c) a medium pressure column, wherein said medium pressure column is thermally coupled to said low pressure column by said first aluminum reboiler;
- d) at least one partition located in said sump;
- e) at least one second reboiler, wherein:
 - 1) said second reboiler is located in said sump;
 - 2) said partition separates said first reboiler and said second reboiler; and
 - 3) said second reboiler is less inflammable than said first reboiler;
- f) a first purge, wherein said first purge sends at least a portion of said oxygen rich liquid bath to said second reboiler;
- g) a conduit which sends oxygen vaporized by said second reboiler back into said low pressure column;
- h) a second purge, wherein said second purge purges at least a portion of said oxygen rich liquid bath in said second reboiler; and
- i) a nitrogen conduit connecting said medium pressure column with said first reboiler.